

Wednesday 10 January 2024 – Morning

Level 3 Cambridge Technical in IT

05838/05839/05840/05841/05842/05877 Unit 1: Fundamentals of IT

Time allowed: 1 hour 30 minutes

C380/2401



You must have:

- a calculator



Please write clearly in black ink. Do not write in the barcodes.

Centre number

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Candidate number

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First name(s)

Last name

Date of birth

D	D	M	M	Y	Y	Y	Y
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INSTRUCTIONS

- Use black ink.
- Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.
- Answer **all** the questions.

INFORMATION

- The total mark for this paper is **80**.
- The marks for each question are shown in brackets [].
- Quality of extended response will be assessed in questions marked with an asterisk (*).
- This document has **16** pages.

ADVICE

- Read each question carefully before you start your answer.

Section A

Put a tick (✓) in the box next to the **one** correct answer for each question.

1 Which component is connected using a **socket**?

A Hard drive

B Motherboard

C Processor

D USB

[1]

2 Which port supports **isochronous** devices?

A Ethernet

B Fibre channel

C Firewire

D SATA

[1]

3 Which of the following is a characteristic of **closed** source software?

A Designed to meet specific needs of a business

B Software can be copied

C Source code can be modified

D Source code is locked to prevent modification

[1]

4 Which of the following is classified as **productivity software**?

A CAD/CAM

B Debugger

C MIS

D Word processor

[1]

5 Which **protocol** is used to manage network devices?

A FTP

B HTTP

C SNMP

D UDP

[1]

6 Which of the following allows **communication** between different networks?

A Default gateway

B IP address

C Socket

D Subnet mask

[1]

7 What does **CRM** stand for?

A Content Replacement Mode

B Content Restoration Management

C Customer Relationship Management

D Customer Replacement Mode

[1]

8 Which of the following is **not** a use of a web server?

A To deliver email messages

B To host web pages

C To manage HTTP requests

D To store a list of known URLs mapped to IP addresses

[1]

9 Which of the following **verbal** communication methods can be used formally in person or remotely?

A Email

B Letter

C Meeting

D Telephone call

[1]

10 Which of the following **best** describes web communication technology?

A Distribution of electronic messages

B Software used to present information to more than one person at a time

C Software used to produce and store text on a computer

D System of connected servers supplying hyperlinked documents

[1]

11 Which of the following is an **ethical** issue that should be addressed by an organisation?

A Disaster recovery

B Health and safety

C Security of information

D Staying safe online

[1]

12 Which **development tool** converts high level programming code one statement at a time into a different language?

A Antivirus

B Compiler

C Debugger

D Translator

[1]

13 **Complete** the following sentence.

A mail server uses _____ protocols.

A FTP and POP

B HTTP and SMTP

C ICMP and HTTP

D SMTP and POP

[1]

14 **Complete** the following sentence.

Data theft is the _____ .

A Interception of data during transmission across a network

B Manipulation of a person to provide log in details

C Use of a system of computers infected with malicious software

D Use of malicious code that replicates itself

[1]

15 Which of the following is **not** a scale of change driver in an organisation?

A Change in business practice

B Competition

C Legislation

D Remote access for employees

[1]

Section B

Friends On-Line Social (FOLS) is a social network created to link friends together by sharing memories. Memories can be created using images and documents that friends create when they take part in events together. The images and documents are attached to a calendar shown on the FOLS app. Friends can tag and post comments on the calendar.

16 Friends On-Line Social (FOLS) can be accessed on a range of devices.

Identify and describe **two** types of communication hardware that can be used to **connect** devices at home or at events.

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[4]

17 FOLS will use **cloud storage** for their users to store their images and documents.

Identify and describe **two** characteristics of **cloud storage** that makes it a suitable form of storage for FOLS to use.

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[4]

18 The amount of storage space required to store the images and documents is calculated using the **metric measurement** system.

(a) Explain what a **bit** and a **nibble** mean.

Bit:

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Nibble:

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[4]

(b) One stored image takes up 3488 KB of space.

Convert 3488 KB into megabytes (MB).

You **must** show your workings.

megabytes (MB)..... **[2]**

19 FOLS employ programmers who work remotely.

(a) Identify and describe **three personal attributes** that a programmer needs to demonstrate to carry out their job role.

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[6]

(b) Identify **two** ways that the FOLS programmers can demonstrate that they are **ready** for **work**.

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[2]

(c) The FOLS programmers communicate with each other using a private **social network**.

Explain **one** advantage of using a **social network** for this purpose.

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[2]

(b) Identify and explain **one** characteristic of using an **ADSL** connection to work remotely.

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(c) Identify **one** characteristic of using **cellular connections**.

Explain how this could affect the **use** of the new social network by the FOLS users.

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..... [3]

21 The computers used by the FOLS programmers have **utility software** installed.

(a) Identify and explain **three** different types of **utility software**.

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[9]

(b) Explain how **overwriting** data can be used by FOLS when disposing of computer equipment.

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[2]

22 FOLS could use the Transmission Control Protocol (**TCP**) or User Data Protocol (**UDP**) when users are connecting to the social network.

Compare the suitability of the features of **TCP** and **UDP** for connecting to the social network.

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EXTRA ANSWER SPACE

If you need extra space use this lined page. You must write the question numbers clearly in the margin.

Lined area for writing answers, consisting of horizontal dotted lines and a vertical solid line on the left margin.



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